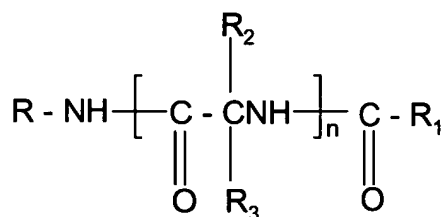


IN THE CLAIMS:

The claims are amended without prejudice as indicated in the following listing. The listing of claims will replace all prior versions and listing of claims in the application. Any claim cancelled is cancelled without prejudice.

1-34. (Cancelled)

35. (Currently Amended) A method of treating a patient suffering from bipolar disease comprising administering thereto a therapeutically effective amount of a compound for treating bipolar disease, said compound having the formula:



wherein

R is ~~hydrogen, lower alkyl, lower alkenyl, lower alkynyl, aryl, aryl lower alkyl, heterocyclic, heterocyclic lower alkyl, lower alkyl heterocyclic, lower cycloalkyl, lower cycloalkyl lower alkyl,~~ and R is unsubstituted or is substituted with at least one electron withdrawing group or electron donating group;

R₁ is ~~hydrogen or lower alkyl~~ and is unsubstituted or substituted with at least one electron withdrawing group or electron donating group;

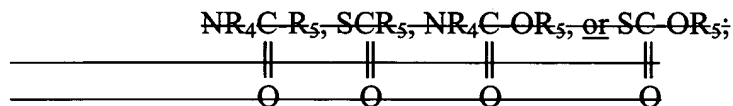
~~R₂ and R₃ are independently~~ is hydrogen, lower alkyl, lower alkenyl, lower alkynyl, aryl lower alkyl, aryl, halo, heterocyclic, heterocyclic lower alkyl, lower alkyl heterocyclic, lower cycloalkyl, lower cycloalkyl lower alkyl, or Z-Y,

R₃ is lower alkyl, lower alkenyl, lower alkynyl, aryl, aryl lower alkyl, halo, heterocyclic, heterocyclic lower alkyl, lower alkyl heterocyclic, lower cycloalkyl, lower cycloalkyl lower alkyl or ZY; wherein R₂ and R₃ may be unsubstituted or substituted with at least one electron withdrawing group or electron donating group, and wherein heterocyclic in R₂ and R₃ is furyl, thienyl, pyrazolyl, pyrrolyl, imidazolyl, indolyl, thiazolyl, oxazolyl, isothiazolyl, isoxazolyl, piperidyl, pyrrolinyl, piperazinyl, quinolyl, triazolyl, tetrazolyl, isoquinolyl, benzofuryl, benzothienyl, morpholinyl, benzoxazolyl, tetrahydrofuryl, pyranyl, indazolyl, purinyl, indolinyl, pyrazolindinyl, imidazolindyl, imidazolindinyl, pyrrolidinyl, furazanyl, N-methylindolyl, methylfuryl, pyridazinyl, pyrimidinyl, pyrazinyl, epoxy, aziridino, oxetanyl or azetidiny;

Z is O, S, ~~S(O)_a, NR₄, or PR₄;~~ or NR₆'

Y is hydrogen, lower alkyl, aryl, aryl lower alkyl, lower alkenyl, or lower alkynyl, ~~heterocyclic, heterocyclic lower alkyl,~~ and Y may be unsubstituted or substituted with an electron donating group or an electron withdrawing group, or

ZY taken together is ~~NR₄NR₅R₇, NR₄OR₅, or ONR₄R₇, OPR₄R₅, PR₄OR₅, SNR₄R₇, NR₄SR₇, SPR₄R₅, or PR₄SR₇, NR₄PR₅R₆, or PR₄NR₅R₇,~~



R₆' is hydrogen or lower alkyl and R₆' may be unsubstituted or substituted with an electron withdrawing group or an electron donating group;

R₄, and R₅ ~~and~~ R₆ are independently hydrogen, lower alkyl, aryl, aryl lower alkyl, lower alkenyl, or lower alkynyl, wherein R₄, and R₅ ~~and~~ R₆ ~~may be~~ are independently

unsubstituted or substituted with an electron withdrawing group or an electron donating group;
and

R_7 is $COOR_8$, COR_8 , hydrogen, lower alkyl, aryl, or aryl lower alkyl, ~~lower alkenyl or lower alkynyl~~ wherein R_7 may be unsubstituted or substituted with an electron withdrawing group or electron donating group;

R_8 is hydrogen or lower alkyl, or aryl lower alkyl, and the aryl or alkyl group may be unsubstituted or substituted with an electron withdrawing group or an electron donating group; and

n is 1; n is 1-4; and

a is 1-3.

wherein the electron withdrawing group and electron donating group are selected from the group consisting of halo, nitro, lower alkenyl, lower alkynyl, formyl, aryl, trifluoromethyl, aryl lower alkanoyl, lower alkoxy carbonyl, hydroxy, lower alkoxy, lower alkyl, mercapto, lower alkylthio and lower alkylidithio.

36. (Currently Amended) The method according to Claim 35 wherein ~~one of~~ R_2 and R_3 is hydrogen.

37. Cancelled

38. Cancelled

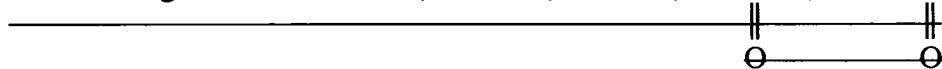
39. Cancelled

40. (Currently Amended) The method according to Claim 35 wherein R_2 is hydrogen, lower alkyl, aryl, aryl lower alkyl, heterocyclic lower alkyl or ZY and R_3 ~~are independently~~ is lower alkyl, aryl, aryl lower alkyl, heterocyclic, heterocyclic lower alkyl, or ZY;

~~Z is O, NR_4 or PR_4 ;~~

~~Y is hydrogen, lower alkyl, aryl, aryl lower alkyl, heterocyclic or heterocyclic lower alkyl; or~~

~~ZY taken together is $NR_4NR_5R_7$, NR_4OR_5 , ONR_4R_7 , $NR_4C(R_5)$, or $NR_4C(R_5)OR_5$; and~~



~~R_4 , R_5 and R_7 are independently hydrogen, lower alkyl, aryl or aryl lower alkyl. and R_2 and R_3 are independently unsubstituted or substituted by an electron withdrawing group or electron donating group.~~

41. (Currently Amended) The method according to Claim 40 wherein R_2 is hydrogen and R_3 is lower alkyl, aryl, aryl lower alkyl, heterocyclic, heterocyclic lower alkyl or ZY;

~~Z is O, NR_4 or PR_4 ;~~

~~Y is hydrogen, lower alkyl, aryl, aryl lower alkyl, heterocyclic or heterocyclic lower alkyl; or~~

~~R₄, R₅ and R₇ are independently hydrogen, lower alkyl, aryl or aryl lower alkyl. which R₃ may be unsubstituted or substituted with an electron withdrawing group or electron donating group.~~

42. (Currently Amended) The method according to Claim 41 35 wherein

R₂ is hydrogen and R₃ is lower alkyl, which may be unsubstituted or substituted with an electron donating or electron withdrawing group, NR₄OR₅, or ONR₄PR₇.

43. (Currently Amended) The method according to Claim 41 42 wherein R₃ is lower alkyl which is unsubstituted or substituted with hydroxy or lower alkoxy, or NR₄OR₅ ~~or~~ ONR₄R₇, wherein R₄, and R₅ ~~and~~ R₇ are independently hydrogen or lower alkyl, R is aryl lower alkyl, which aryl group may be unsubstituted or substituted with an electron withdrawing group or electron donating group and R₁ is lower alkyl.

44. (Original) The method according to Claim 41 wherein R₃ is heterocyclic.

45. (Original) The method according to Claim 44 wherein heterocyclic is heteroaromatic.

46. (Original) The method according to Claim 45 wherein R₃ is furyl, pyridyl, thienyl or thiazolyl.

47. (Original) The method according to Claim 43 wherein aryl is phenyl.

48. (Original) The method according to Claim 43 wherein aryl is phenyl and is unsubstituted or substituted with halo.

49. (Currently Amended) The method according to Claim 35 wherein the compound is

(R)-N-Benzyl-2-acetamido-3-methoxy- propionamide;

O-methyl-N-acetyl-D-serine-m-fluorobenzylamide;

O-methyl-N-acetyl-D-serine-p-fluorobenzylamide;

N-acetyl-D-phenylglycinebenzylamide;

D-1,2-(N, O-dimethylhydroxylamino)-2- acetamid[[o]]e acetic acid benzylamide;

D-1,2-(O-methylhydroxylamino)-2-acetamid[[o]]e acetic acid benzylamide.

50-53. (Cancelled)

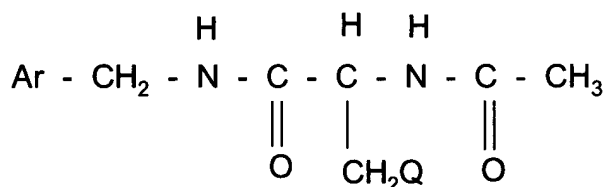
54. Cancelled

55-56. (Cancelled)

57. (Original) The method according to Claim 35 wherein the carbon atom which is substituted by R₂ and R₃ is in the D configuration.

58-67. (Cancelled)

68. (Previously Presented) The method of Claim 35 wherein the compound is of the formula:



wherein

Ar is aryl which is unsubstituted or substituted with an electron donating or electron withdrawing group, and

Q is lower alkoxy.

69. (Original) The method according to Claim 68 wherein Ar is unsubstituted aryl or aryl substituted with halo.

70. (Original) The method according to Claim 68 wherein Q is methoxy.

71. (Original) The method according to Claim 68 wherein Q is methoxy and Ar is unsubstituted aryl or aryl substituted with halo.

72. (Original) The method according to Claim 68 wherein the carbon atom which is bonded to CH₂Q is in the D configuration.

73. (New) The method according to Claim 35 wherein R is benzyl which may be unsubstituted or substituted with an electron withdrawing group or electron donating group.

74. (New) The method according to Claim 35 wherein R₁ is methyl.

75. (New) The method according to Claim 35 wherein R is benzyl, R₁ is lower alkyl and R₂ is hydrogen.

76. (New) The method according to Claim 75 wherein R₃ is CH₂Q, NR₄OR₅ or NR₄NR₅R₇, wherein Q is lower alkoxy, R₄ is hydrogen or alkyl containing 1-3 carbon atoms, R₅ is hydrogen or alkyl containing 1-3 carbon atoms and R₇ is hydrogen or alkyl containing 1-3 carbon atoms.

77. (New) The method according to Claim 76 wherein R₃ is CH₂Q.

78. (New) The method according to Claim 35 wherein R₁ is methyl, R is benzyl, R₂ is hydrogen, and R₃ is CH₂Q wherein Q is methoxy.

79. (New) The method according to Claim 35 wherein R₁ is methyl, R is m-fluorobenzyl, R₂ is H and R₃ is CH₂Q, wherein Q is methoxy.

80. (New) The method according to Claim 35 wherein R₁ is methyl, R is p-fluorobenzyl, R₂ is H, and R₃ is CH₂Q wherein Q is methoxy.

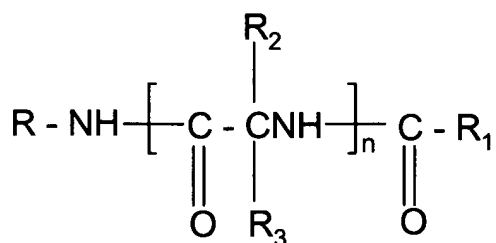
81. (New) The method according to Claim 35 wherein R₁ is methyl, R is benzyl, R₂ is hydrogen and R₃ is phenyl.

82. (New) The method according to Claim 35 wherein R₁ is methyl, R is benzyl, R₂ is hydrogen and R₃ is N(CH₃)OCH₃.

83. (New) The method according to Claim 35 wherein R₁ is methyl, R is benzyl, R₂ is hydrogen and R₃ is NH(OCH₃).

84. (New) The method according to Claim 35 wherein R₁ is methyl, R is fluorophenyl, R₂ is H, and R₃ is CH₂Q, wherein Q is methoxy.

85. (New) A method for alleviating pain in a patient suffering therefrom comprising administering to said patient an analgesic effective amount of a compound of the formula:



wherein

R is aryl lower alkyl and R is unsubstituted or is substituted with at least one electron withdrawing group or electron donating group selected from the group consisting of halo, nitro, lower alkenyl, lower alkynyl, formyl, aryl, trifluoromethyl, lower alkoxy carbonyl, aryl lower alkanoyl, hydroxy, lower alkoxy, lower alkyl, mercapto, lower alkylthio, and lower alkyldithio;

R_1 is methyl, and is unsubstituted or substituted with an electron donating group or an electron withdrawing group selected from the group consisting of halo, nitro, lower alkenyl, lower alkynyl, formyl, aryl, trifluoromethyl, lower alkoxy carbonyl, aryl lower alkanoyl, hydroxy, lower alkoxy, lower alkyl, mercapto, lower alkylthio, and lower alkyldithio;

R_2 is hydrogen, lower alkyl, lower alkenyl, lower alkynyl, aryl, aryl lower alkyl, halo, heterocyclic, heterocyclic lower alkyl, lower alkyl heterocyclic, lower cycloalkyl, lower cycloalkyl lower alkyl, or ZY;

R_3 is lower alkyl, lower alkenyl, lower alkynyl, aryl, aryl lower alkyl, halo, heterocyclic, heterocyclic lower alkyl, lower alkyl heterocyclic, lower cycloalkyl, lower cycloalkyl lower alkyl or ZY;

wherein R_2 and R_3 may be unsubstituted or substituted with at least one electron withdrawing group or electron donating group and wherein heterocyclic in R_2 and R_3 is furyl, thienyl, pyrazolyl, pyrrolyl, imidazolyl, indolyl, thiazolyl, oxazolyl, isothiazolyl, isoxazolyl, piperidyl, pyrrolinyl, piperazinyl, quinolyl, triazolyl, tetrazolyl, isoquinolyl, benzofuryl, benzothienyl, morpholynyl, benzoxazolyl, tetrahydrofuryl, pyranyl, indazolyl, purinyl, indolynyl, pyrazolindinyl, imidazolynyl, imidazolindinyl, pyrrolidinyl, furazanyl, N-methylindolyl, methylfuryl, pyridazinyl, pyrimidinyl, pyrazinyl, epoxy, aziridino, oxetanyl or azetidynyl;

Z is O or NR_6' ;

Y is hydrogen, lower alkyl, aryl, aryl lower alkyl, lower alkenyl or lower alkynyl, and Y may be unsubstituted or substituted with an electron donating group or an electron withdrawing group, or

ZY taken together is $NR_4NR_5R_7$, NR_4OR_5 , or ONR_4R_7 ;

R_6' is hydrogen or lower alkyl;

R₄ and R₅ are independently hydrogen, lower alkyl, aryl, aryl lower alkyl, lower alkenyl, or lower alkynyl, and R₄ and R₅ may be independently unsubstituted or substituted with an electron withdrawing group or an electron donating group;

R₇ is COOR₈, COR₈, hydrogen, lower alkyl, aryl or aryl lower alkyl, which R₇ may be unsubstituted or substituted with an electron withdrawing group or electron donating group;

R₈ is hydrogen or lower alkyl, or aryl lower alkyl, and the aryl or alkyl group may be unsubstituted or substituted with an electron withdrawing group or an electron donating group; and

n is 1.

86. (New) The method according to Claim 85 wherein R₁ is methyl which is unsubstituted.

87. (New) The method according to Claim 85 wherein R is benzyl, which is unsubstituted or substituted on the phenyl ring with an electron donating group or electron withdrawing group.

88. (New) The method according to Claim 86 wherein R is benzyl, which is unsubstituted or substituted on the phenyl ring with an electron donating group or electron withdrawing group.

89. (New) The method according to Claim 85 wherein R₂ is hydrogen.

90. (New) The method according to Claim 86 wherein R₂ is hydrogen.

91. (New) The method according to Claim 87 wherein R₂ is hydrogen.

92. (New) The method according to Claim 88 wherein R_2 is hydrogen.

93. (New) The method according to Claim 85 wherein R_3 is lower alkyl which is unsubstituted or substituted with an electron donating group or electron withdrawing group selected from the group consisting of halo, nitro, carboxy, lower alkenyl, lower alkynyl, formyl, aryl, carboxyamido, trifluoromethyl, lower alkoxycarbonyl, aryl lower alkanoyl, hydroxy, lower alkoxy, lower alkyl, amino, lower alkylamino, dilower alkylamino, aryloxy, mercapto or lower alkylthio.

94. (New) The method according to Claim 86 wherein R_3 is lower alkyl which is unsubstituted or substituted with an electron donating group or electron withdrawing group selected from the group consisting of halo, nitro, carboxy, lower alkenyl, lower alkynyl, formyl, aryl, carboxyamido, trifluoromethyl, lower alkoxycarbonyl, aryl lower alkanoyl, hydroxy, lower alkoxy, lower alkyl, amino, lower alkylamino, dilower alkylamino, aryloxy, mercapto or lower alkylthio.

95. (New) The method according to Claim 87 wherein R_3 is lower alkyl which is unsubstituted or substituted with an electron donating group or electron withdrawing group selected from the group consisting of halo, nitro, carboxy, lower alkenyl, lower alkynyl, formyl, aryl, carboxyamido, trifluoromethyl, lower alkoxycarbonyl, aryl lower alkanoyl, hydroxy, lower alkoxy, lower alkyl, amino, lower alkylamino, dilower alkylamino, aryloxy, mercapto or lower alkylthio.

96. (New) The method according to Claim 88 wherein R_3 is lower alkyl which is unsubstituted or substituted with an electron donating group or electron withdrawing group selected from the group consisting of halo, nitro, carboxy, lower alkenyl, lower alkynyl, formyl, aryl, carboxyamido, trifluoromethyl, lower alkoxy carbonyl, aryl lower alkanoyl, hydroxy, lower alkoxy, lower alkyl, amino, lower alkylamino, dilower alkylamino, aryloxy, mercapto or lower alkylthio.

97. (New) The method according to Claim 89 wherein R_3 is lower alkyl which is unsubstituted or substituted with an electron donating group or electron withdrawing group selected from the group consisting of halo, nitro, carboxy, lower alkenyl, lower alkynyl, formyl, aryl, carboxyamido, trifluoromethyl, lower alkoxy carbonyl, aryl lower alkanoyl, hydroxy, lower alkoxy, lower alkyl, amino, lower alkylamino, dilower alkylamino, aryloxy, mercapto or lower alkylthio.

98. (New) The method according to Claim 90 wherein R_3 is lower alkyl which is unsubstituted or substituted with an electron donating group or electron withdrawing group selected from the group consisting of halo, nitro, carboxy, lower alkenyl, lower alkynyl, formyl, aryl, carboxyamido, trifluoromethyl, lower alkoxy carbonyl, aryl lower alkanoyl, hydroxy, lower alkoxy, lower alkyl, amino, lower alkylamino, dilower alkylamino, aryloxy, mercapto or lower alkylthio.

99. (New) The method according to Claim 91 wherein R_3 is lower alkyl which is unsubstituted or substituted with an electron donating group or electron withdrawing group selected from the group consisting of halo, nitro, carboxy, lower alkenyl, lower alkynyl, formyl, aryl,

carboxyamido, trifluoromethyl, lower alkoxycarbonyl, aryl lower alkanoyl, hydroxy, lower alkoxy, lower alkyl, amino, lower alkylamino, dilower alkylamino, aryloxy, mercapto or lower alkylthio.

100. (New) The method according to Claim 92 wherein R_3 is lower alkyl which is unsubstituted or substituted with an electron donating group or electron withdrawing group selected from the group consisting of halo, nitro, carboxy, lower alkenyl, lower alkynyl, formyl, aryl, carboxyamido, trifluoromethyl, lower alkoxycarbonyl, aryl lower alkanoyl, hydroxy, lower alkoxy, lower alkyl, amino, lower alkylamino, dilower alkylamino, aryloxy, mercapto or lower alkylthio.

101. (New) The method according to any one of Claims 85-102 wherein R_3 is lower alkyl substituted by an electron donating group.

102. (New) The method according to Claim 101 wherein R_3 is lower alkyl substituted by lower alkoxy.